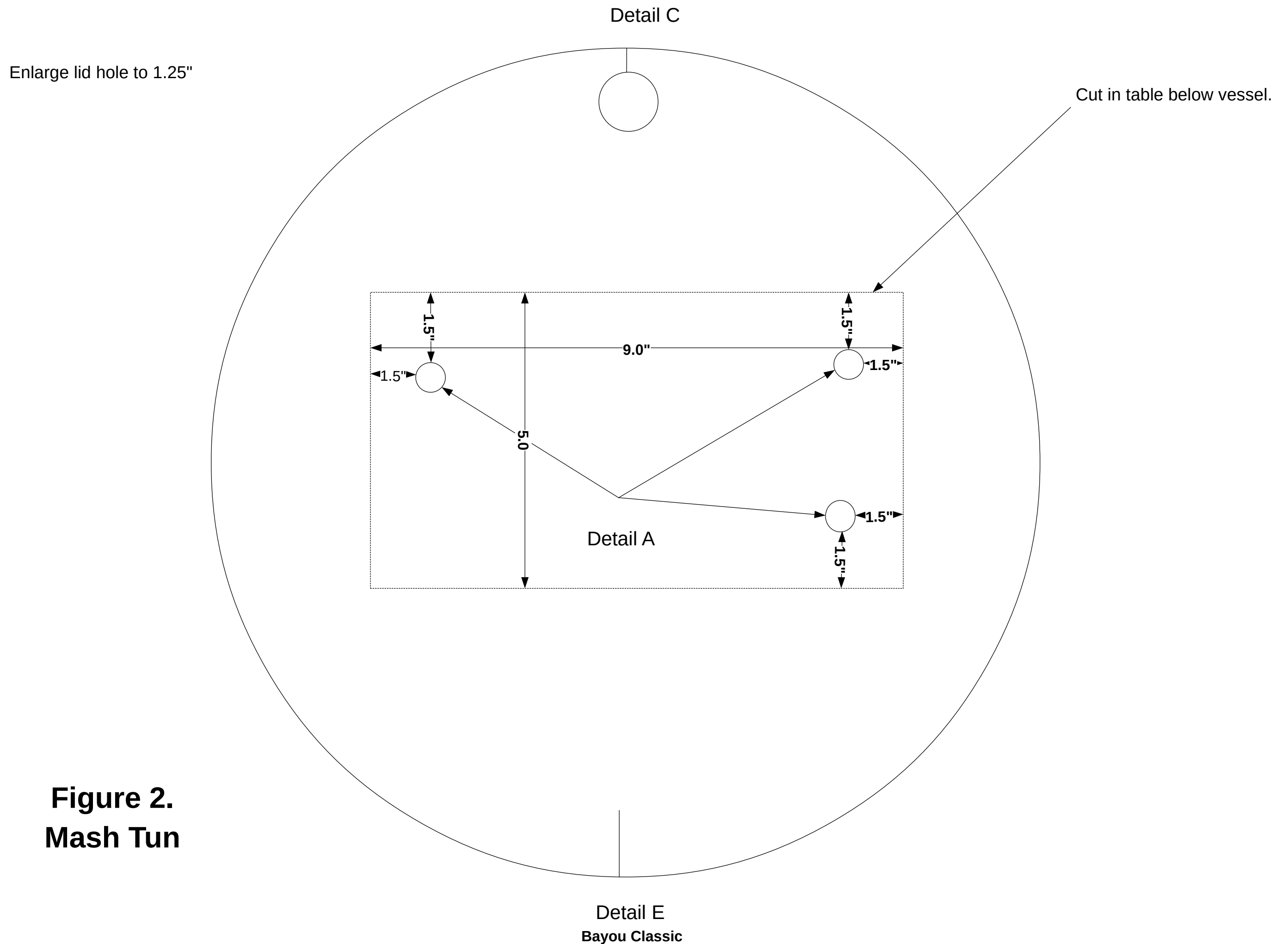


Figure 1.
Boiler



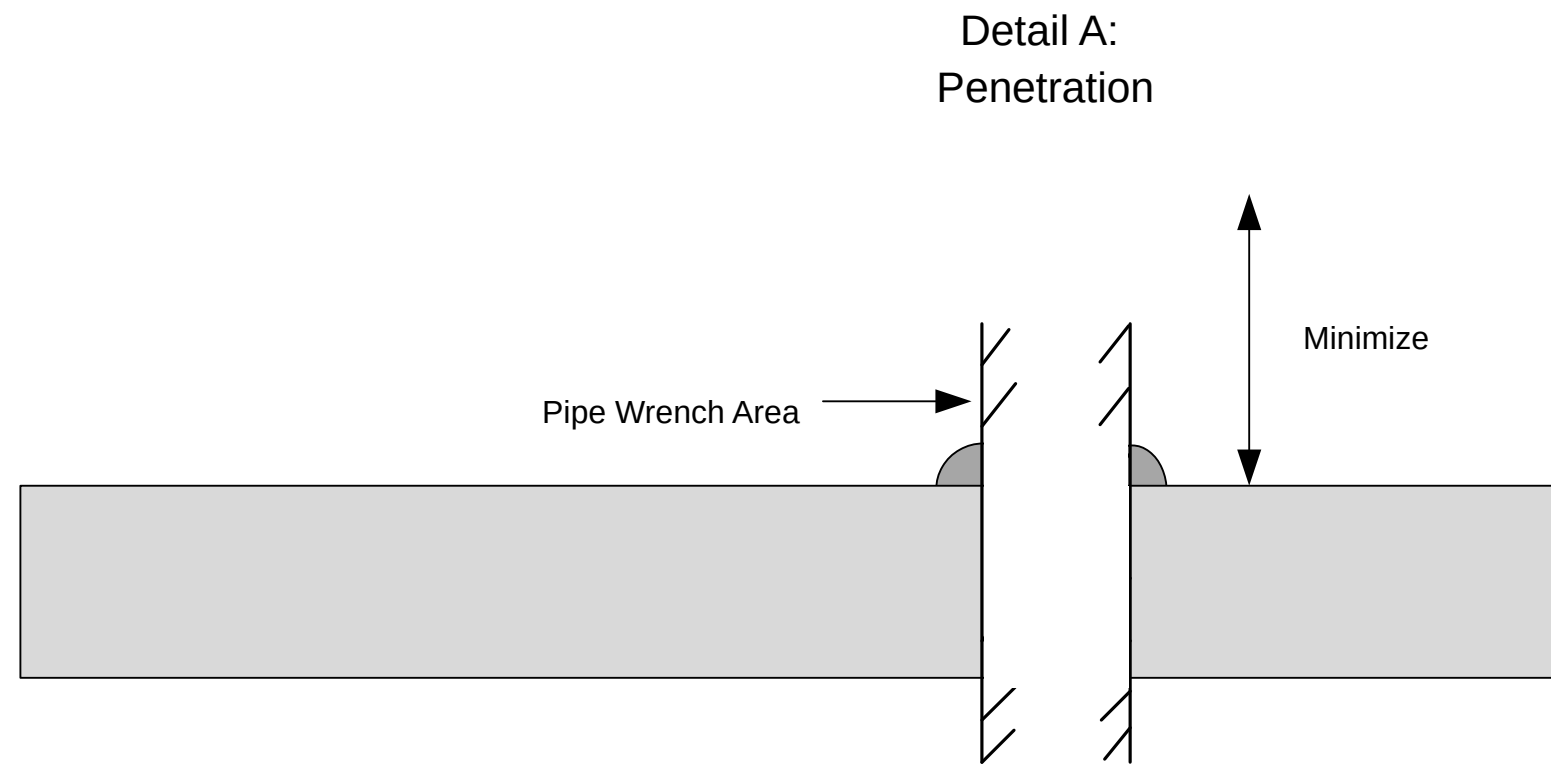


Figure 3

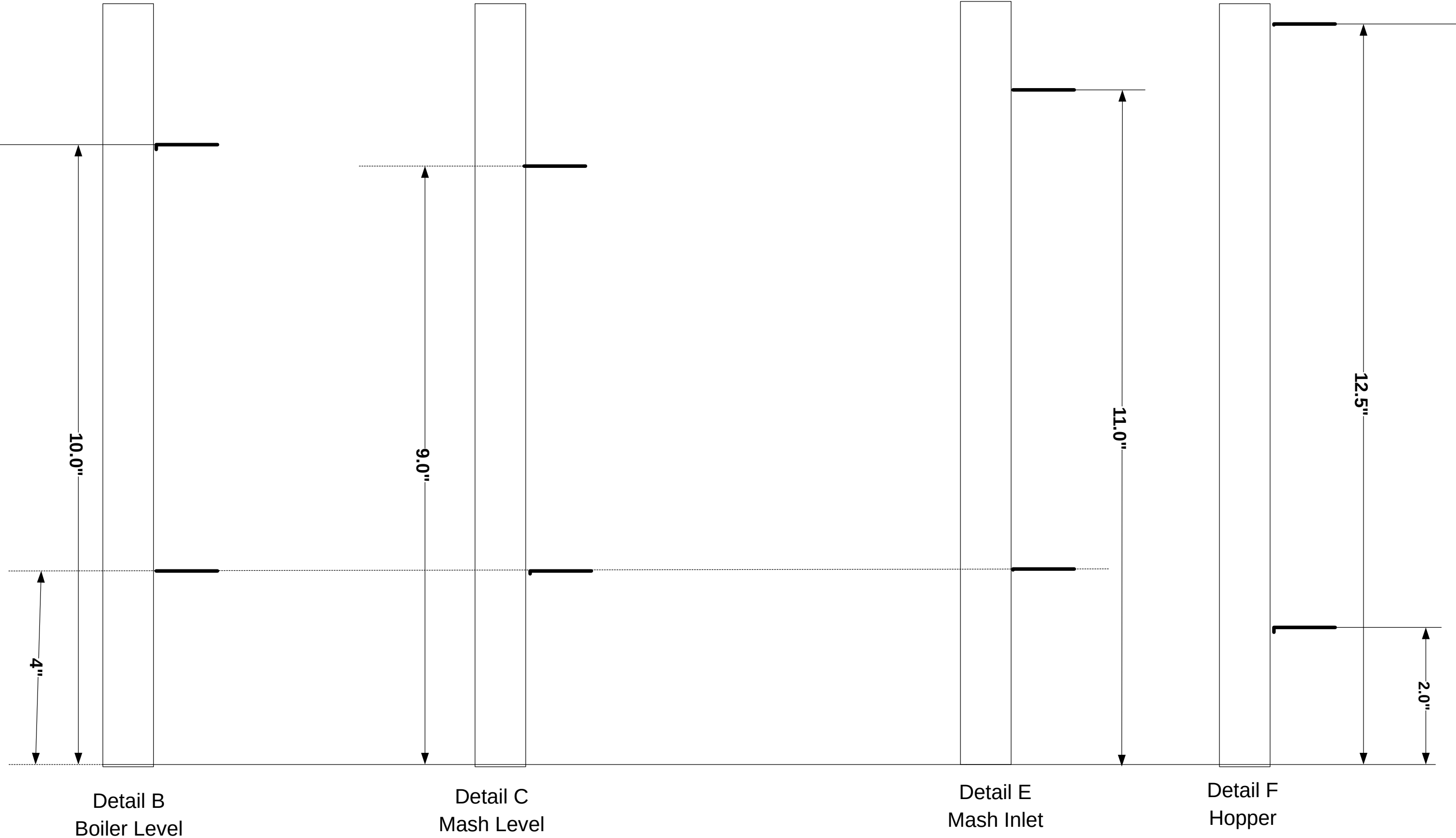


Figure 4

	0	1.25
A	1.25	0.1875
B	1.4375	0.1875
C	1.625	0.5
D	2.125	0.5
E	2.625	0.25
F	2.875	0.25
G	3.125	0.5
H	3.625	0.1875
I	3.8125	0.1875
J	4	0.25
K	4.25	
L	5	0.5
M	5.5	0.5
N	6	

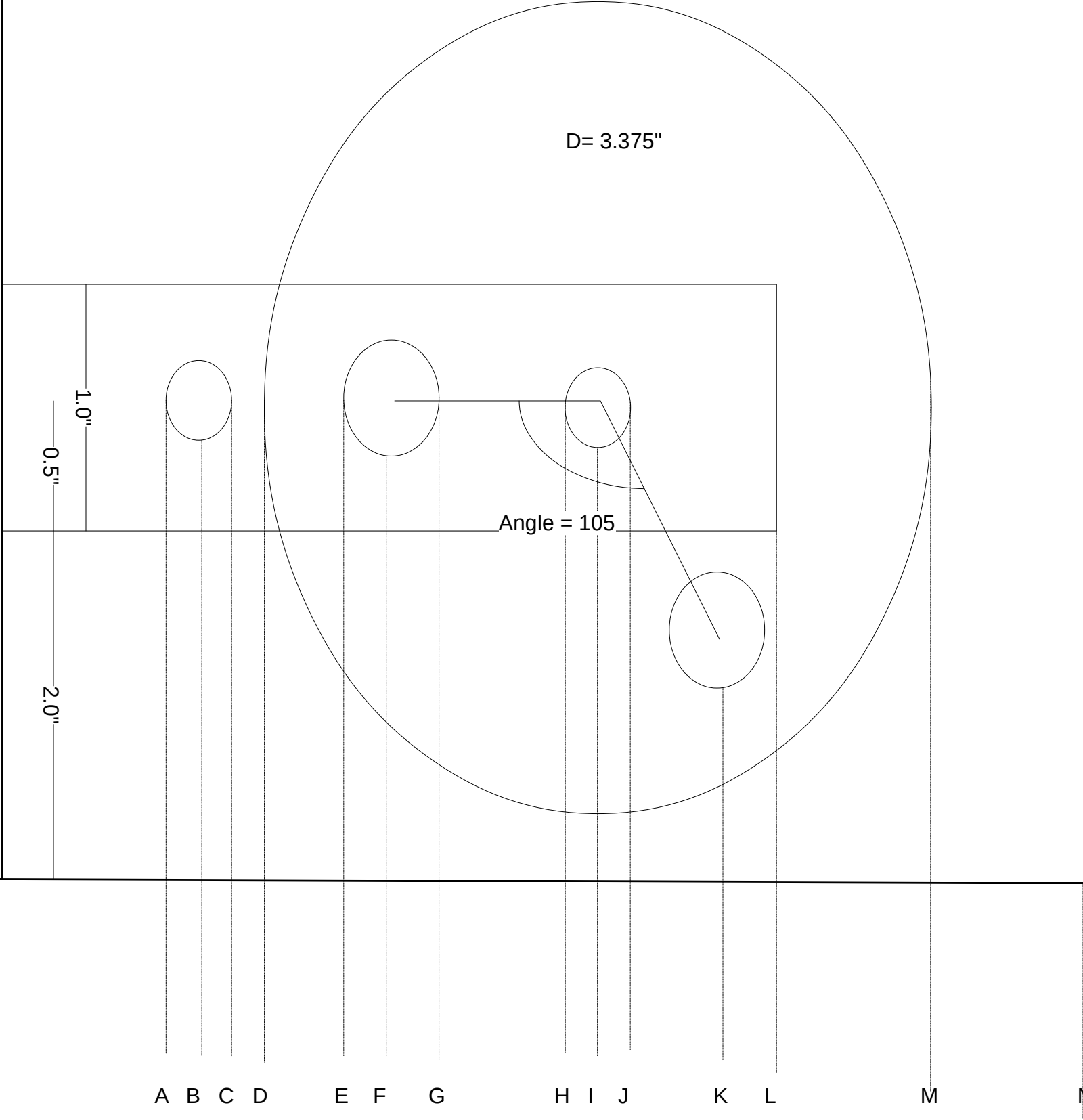
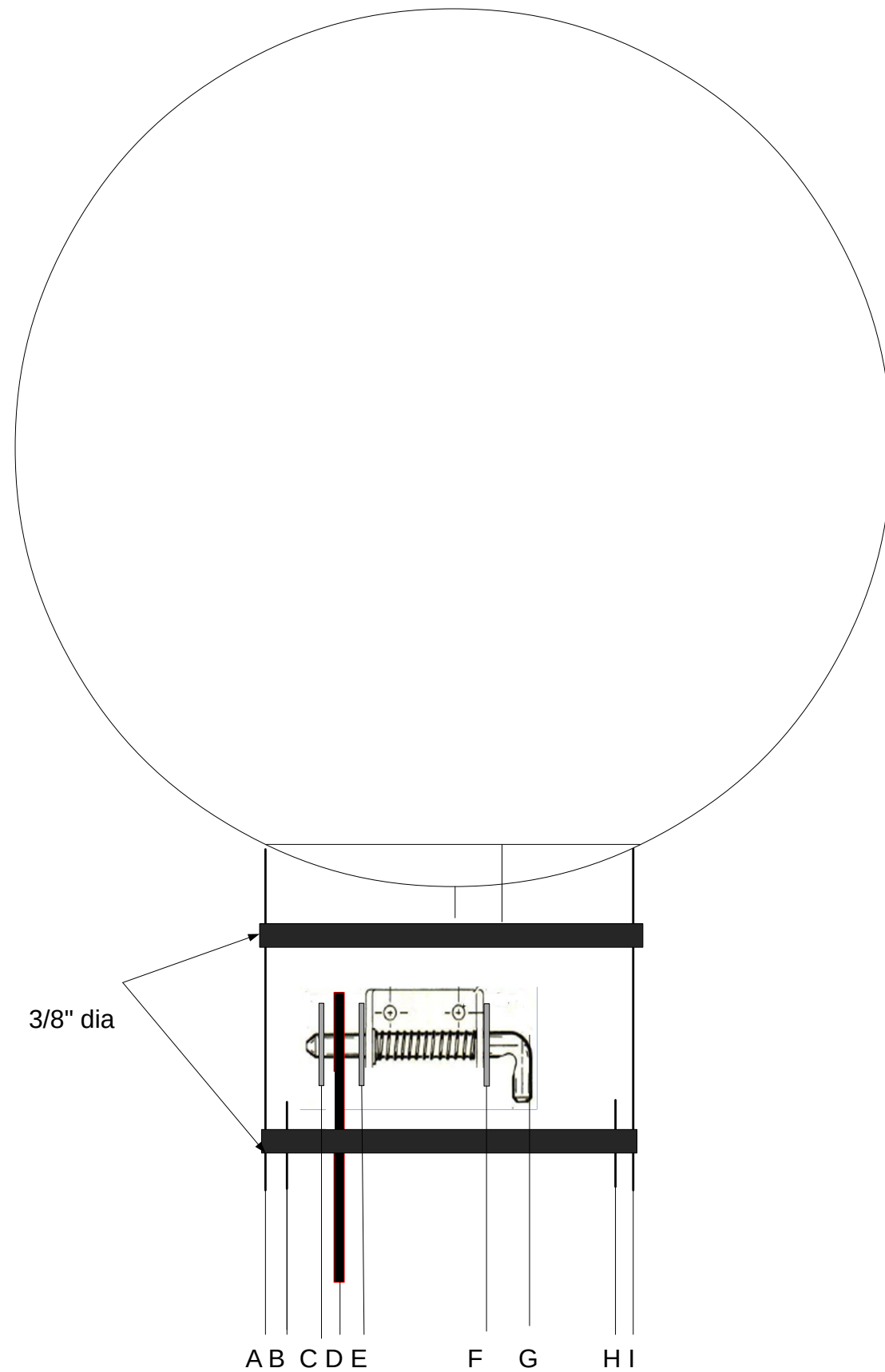


Figure 5



$P = .375$
 $E = 1.250$
 $R1 = 1.187$
 $R2 = 0.687$
 $L = 2.0$
 $W = 0.656$
 $B = 1.12$
 $T = 0.12$
 $H1 = 0.375$
 $H2 = 0.437$
 $H3 = 1.125$
 $D = 0.265$

This piece was purchased.

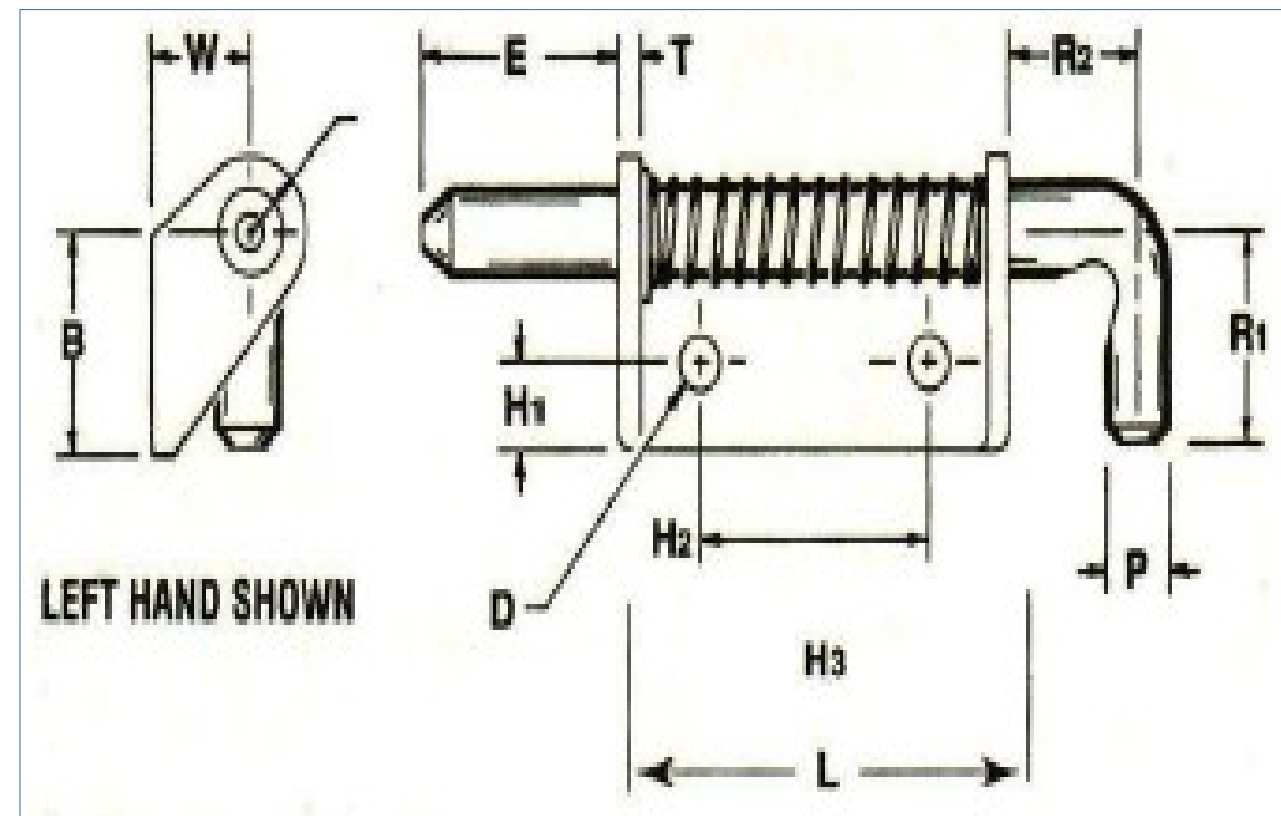
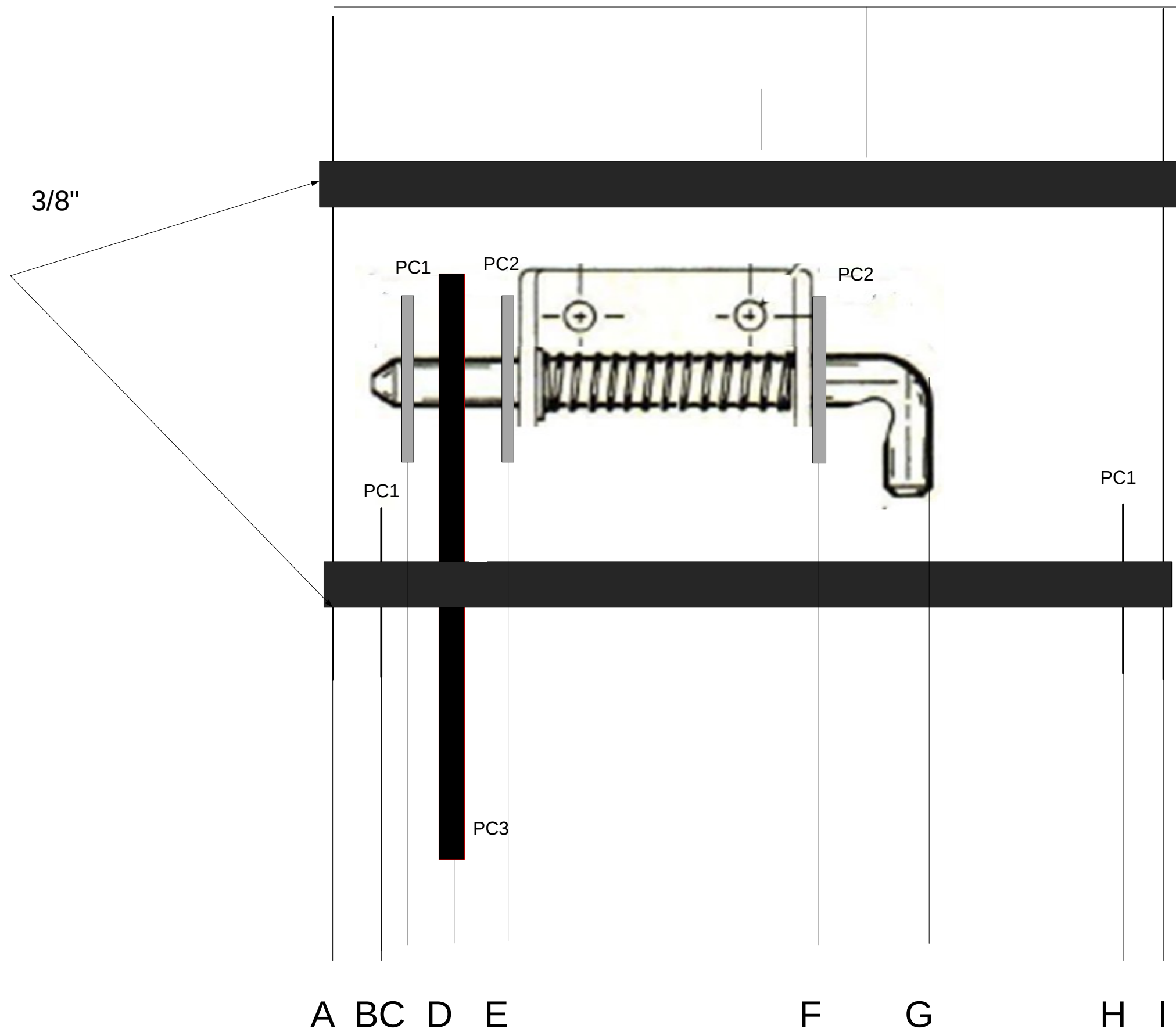


Figure 6



A	0	0
B	0.5	0.5
C	0.25	0.75
D	0.4375	1.1875
E	0.4375	1.625
F	2.00	3.625
G	1	4.625
H	0.875	5.5
I	0.5	6

Figure 6a

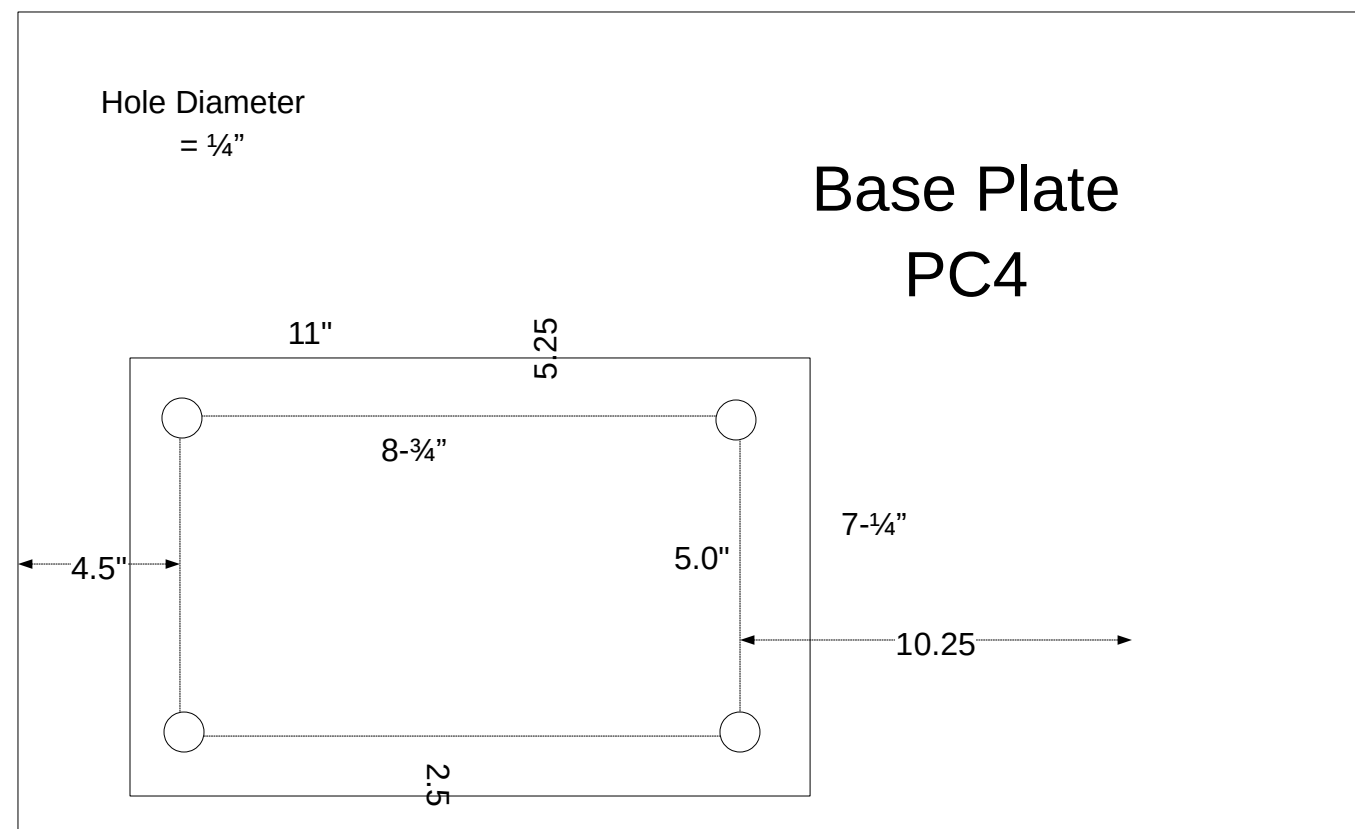
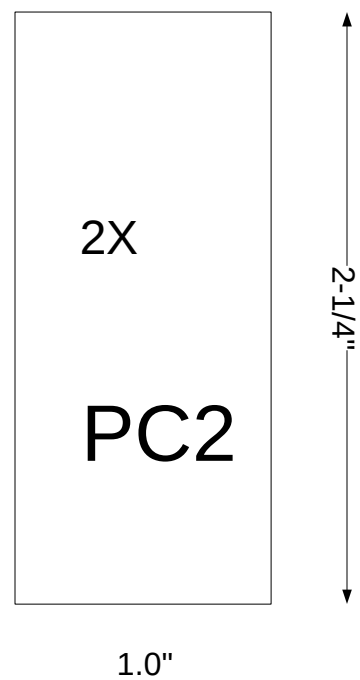
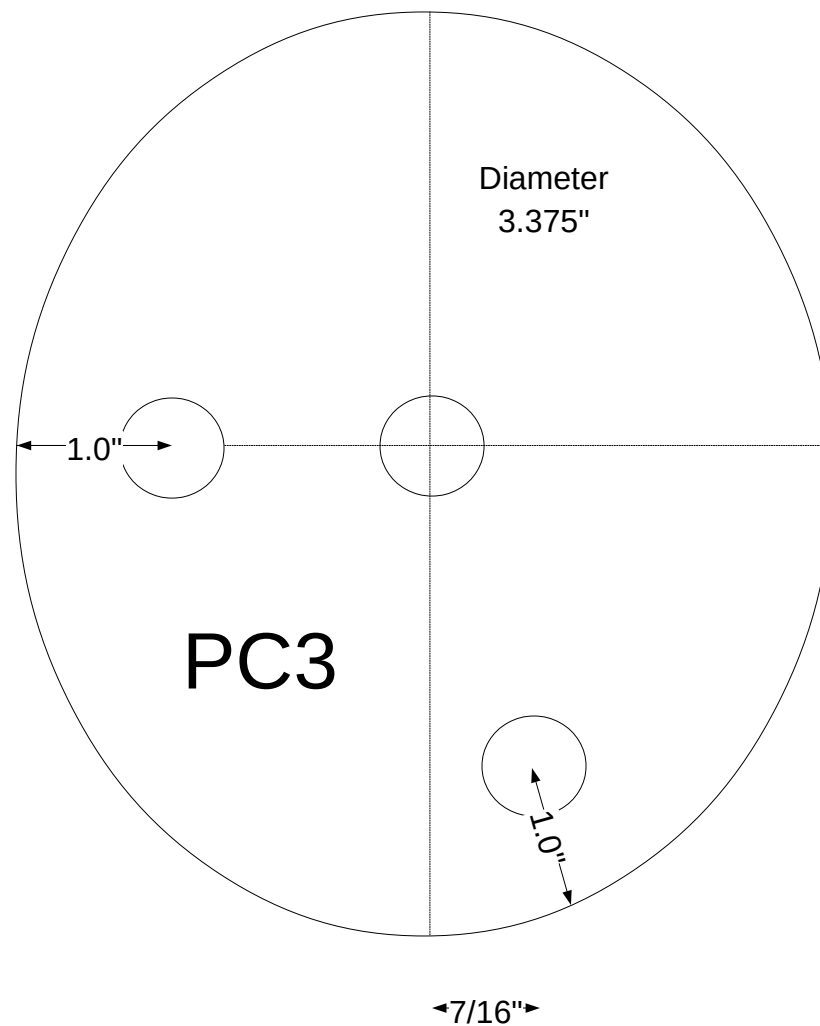
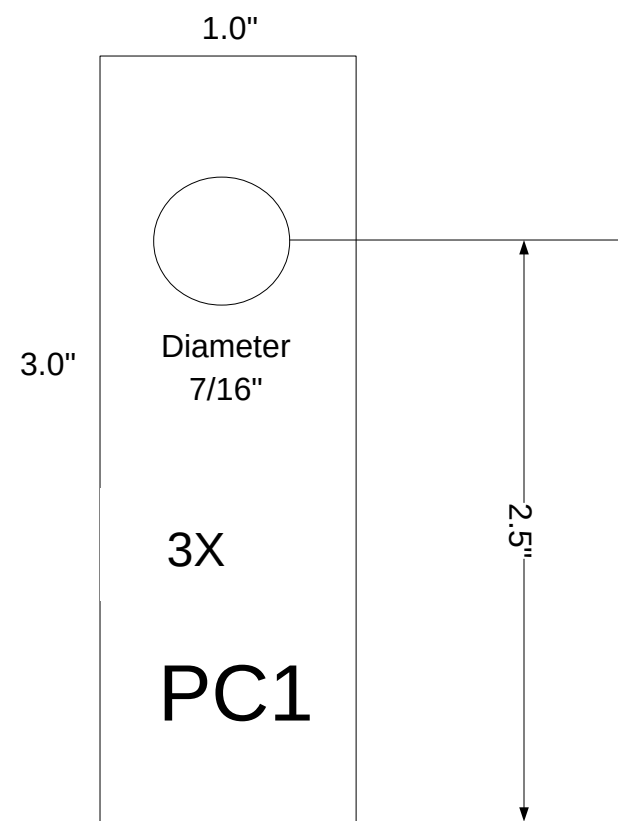
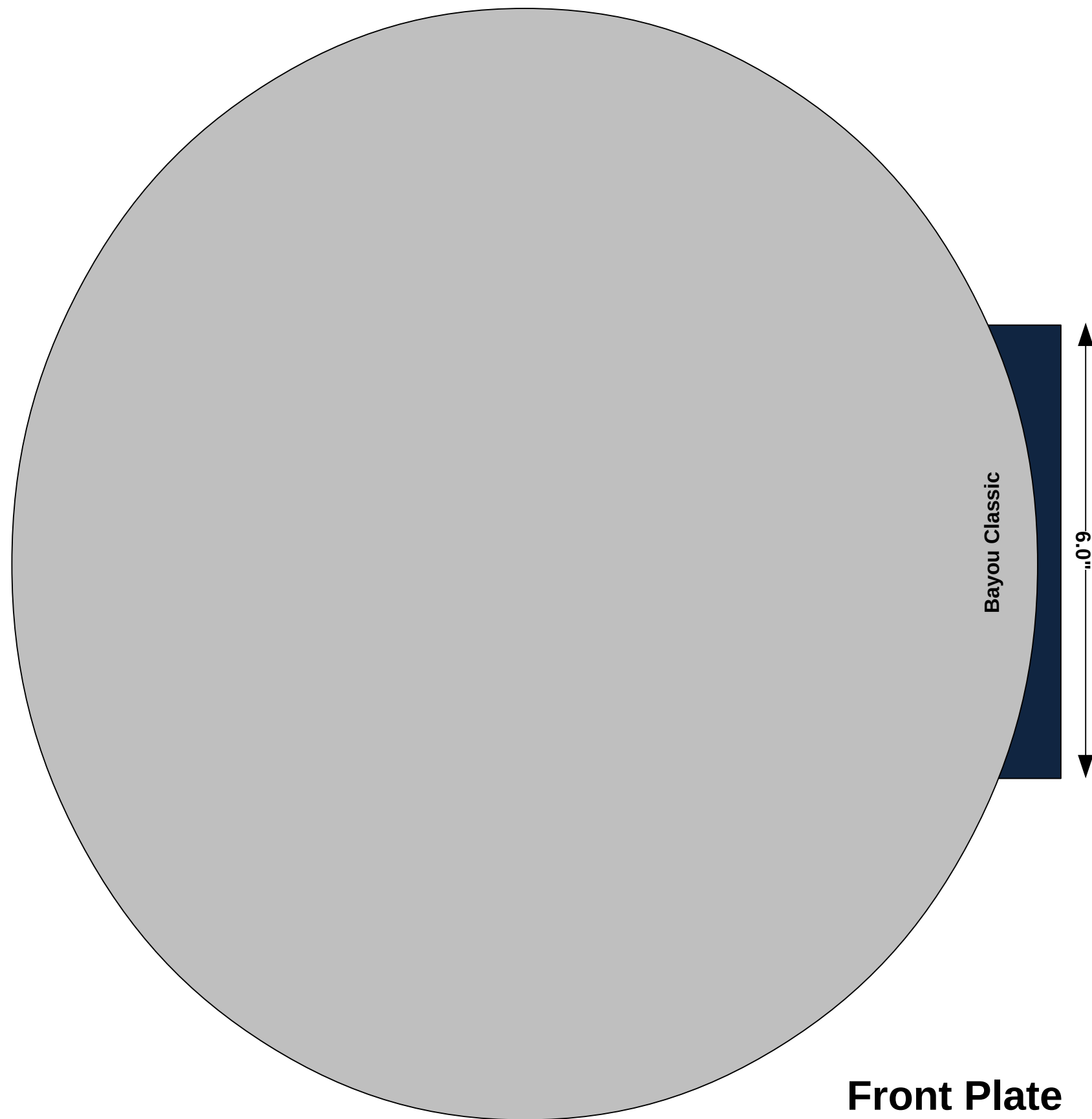
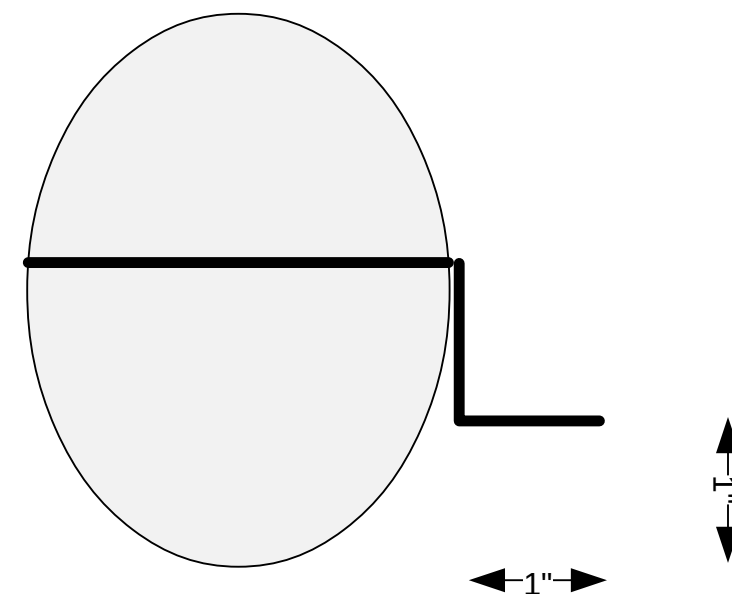
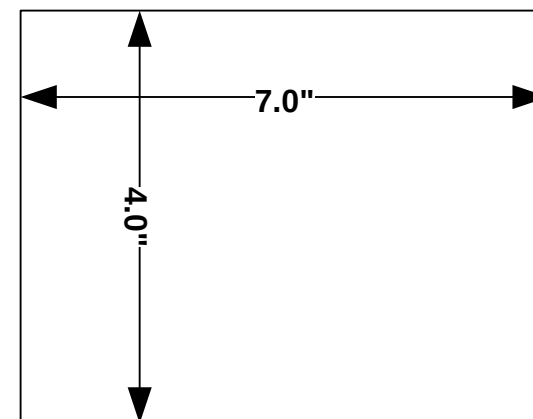


Figure 7

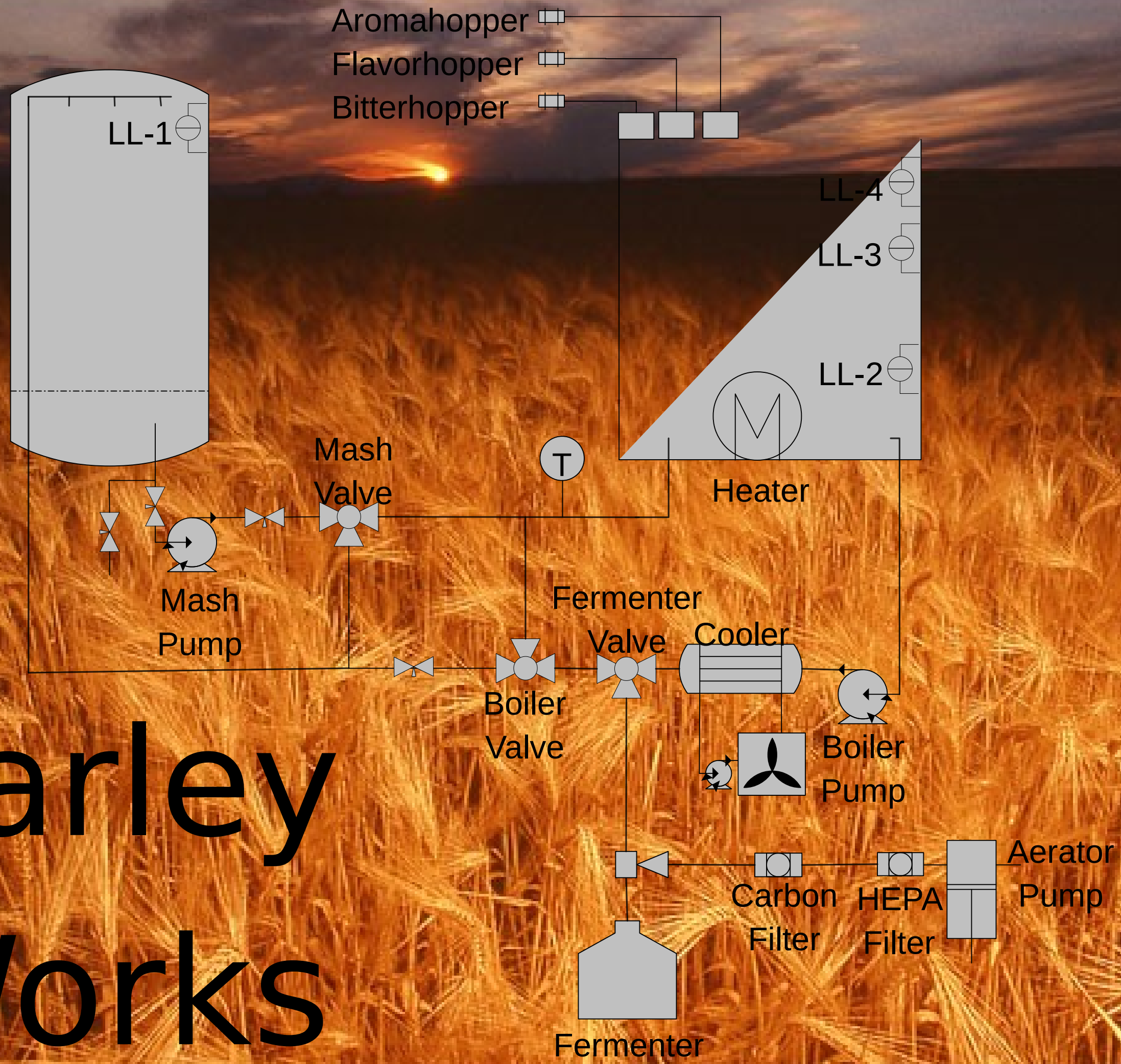


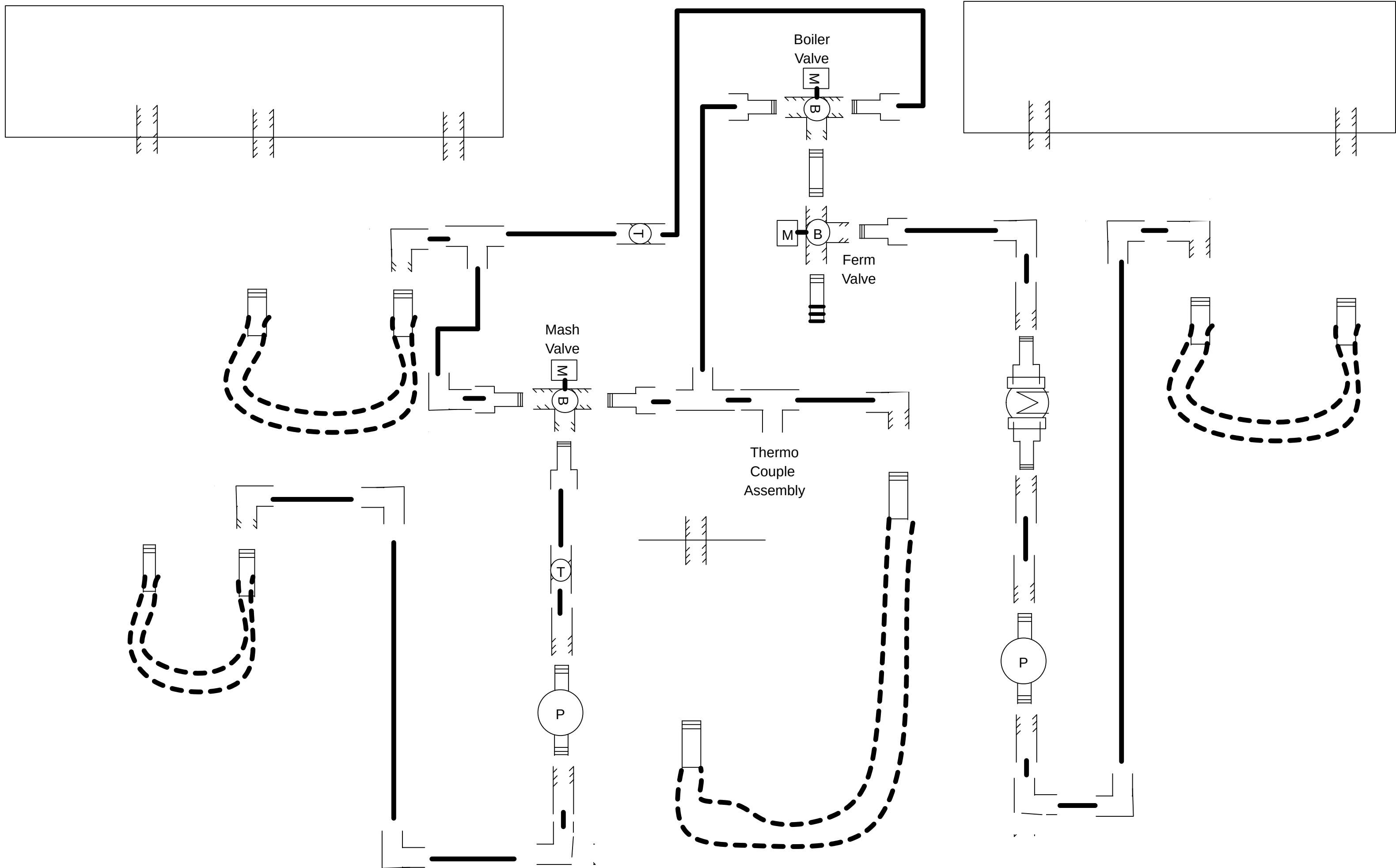
Front Plate

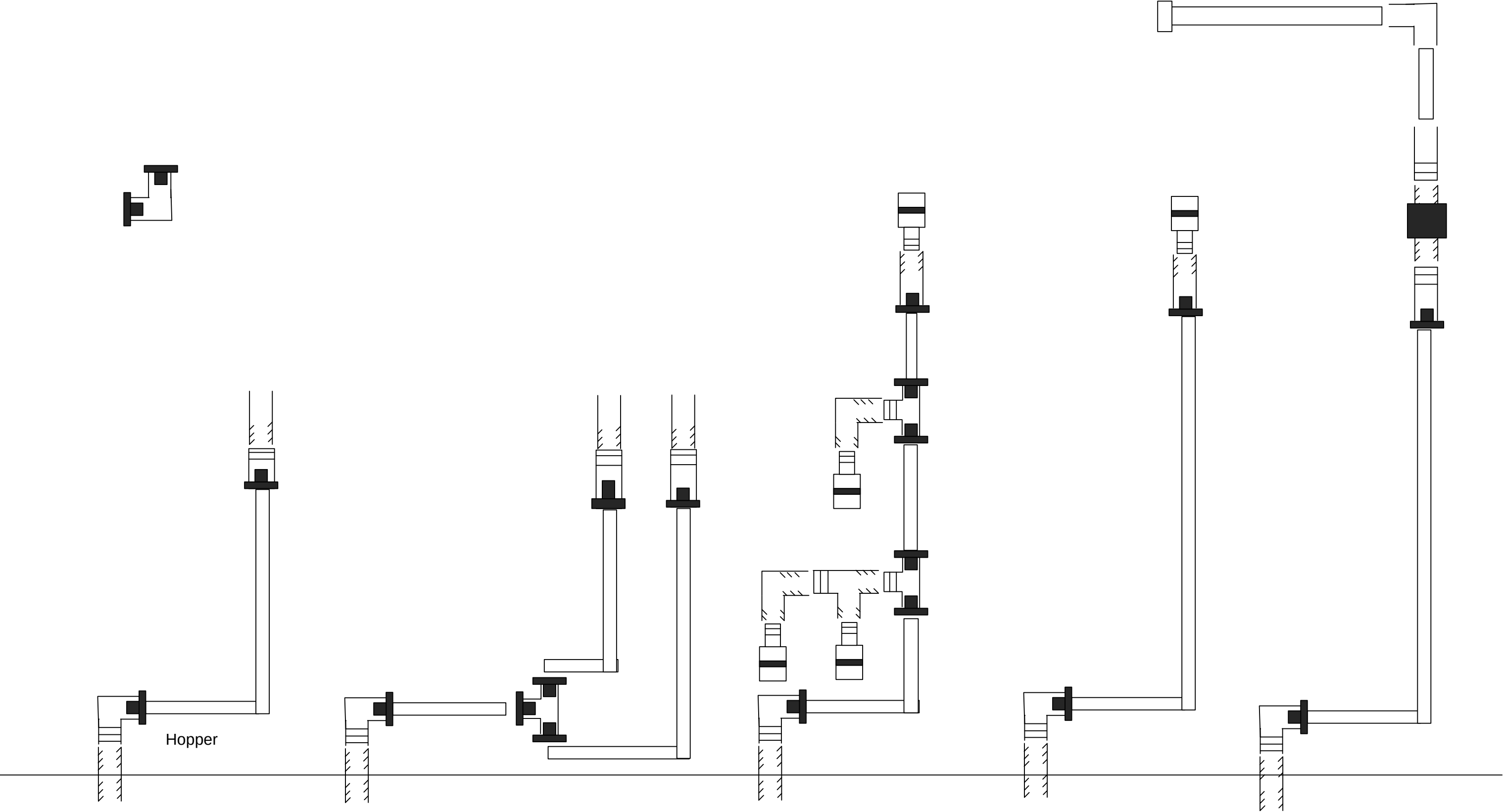


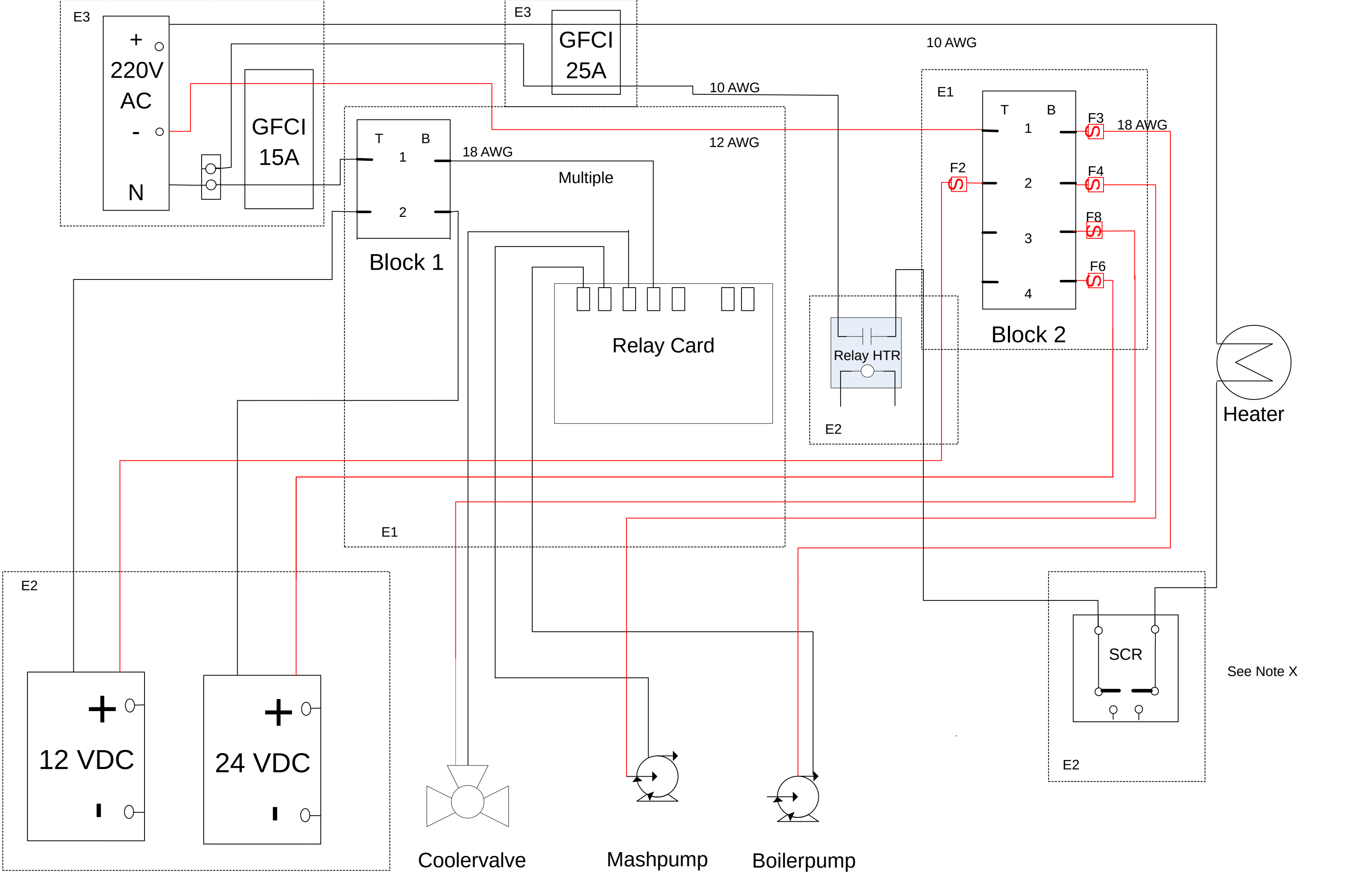
Hopper

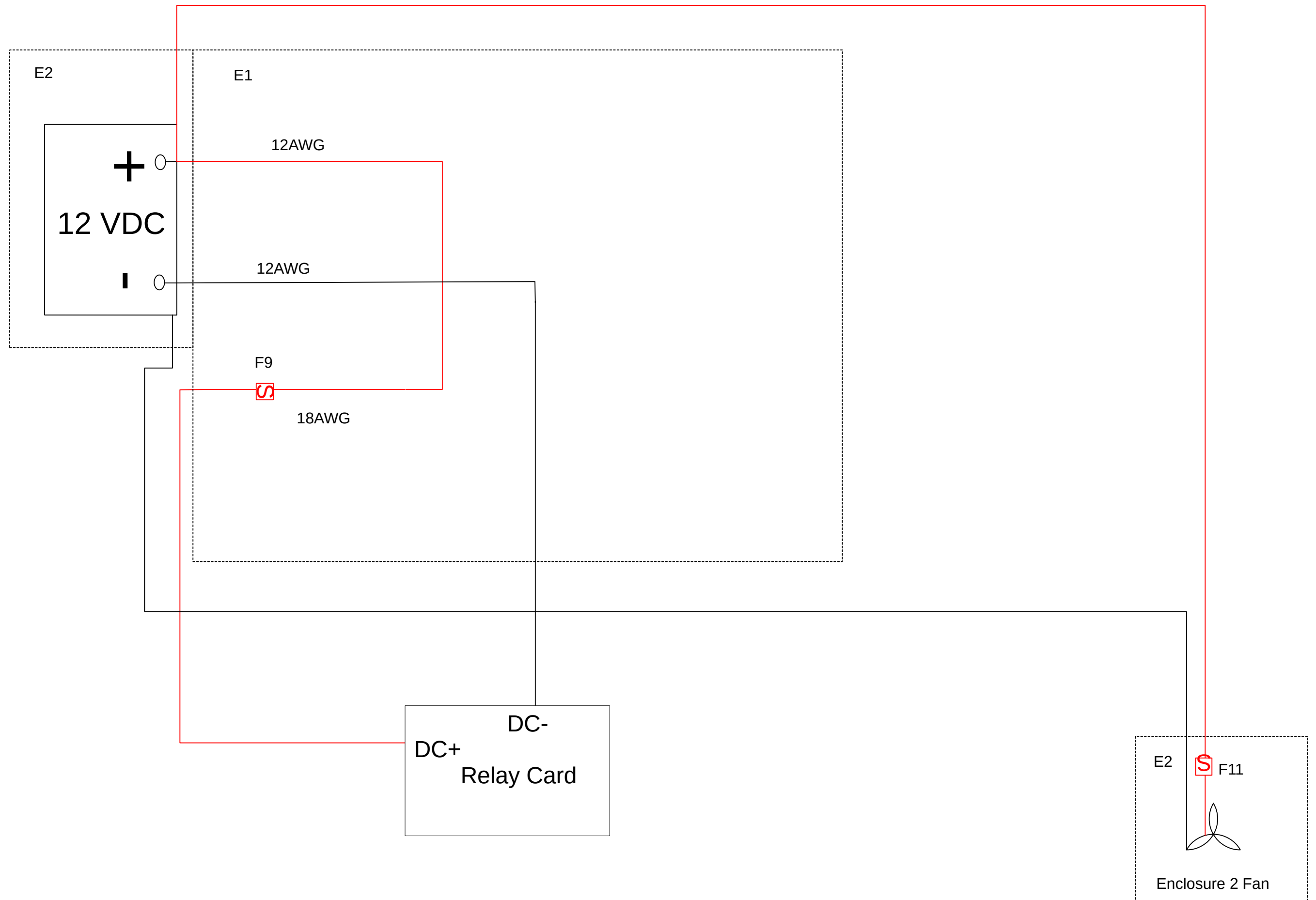
Barley Works

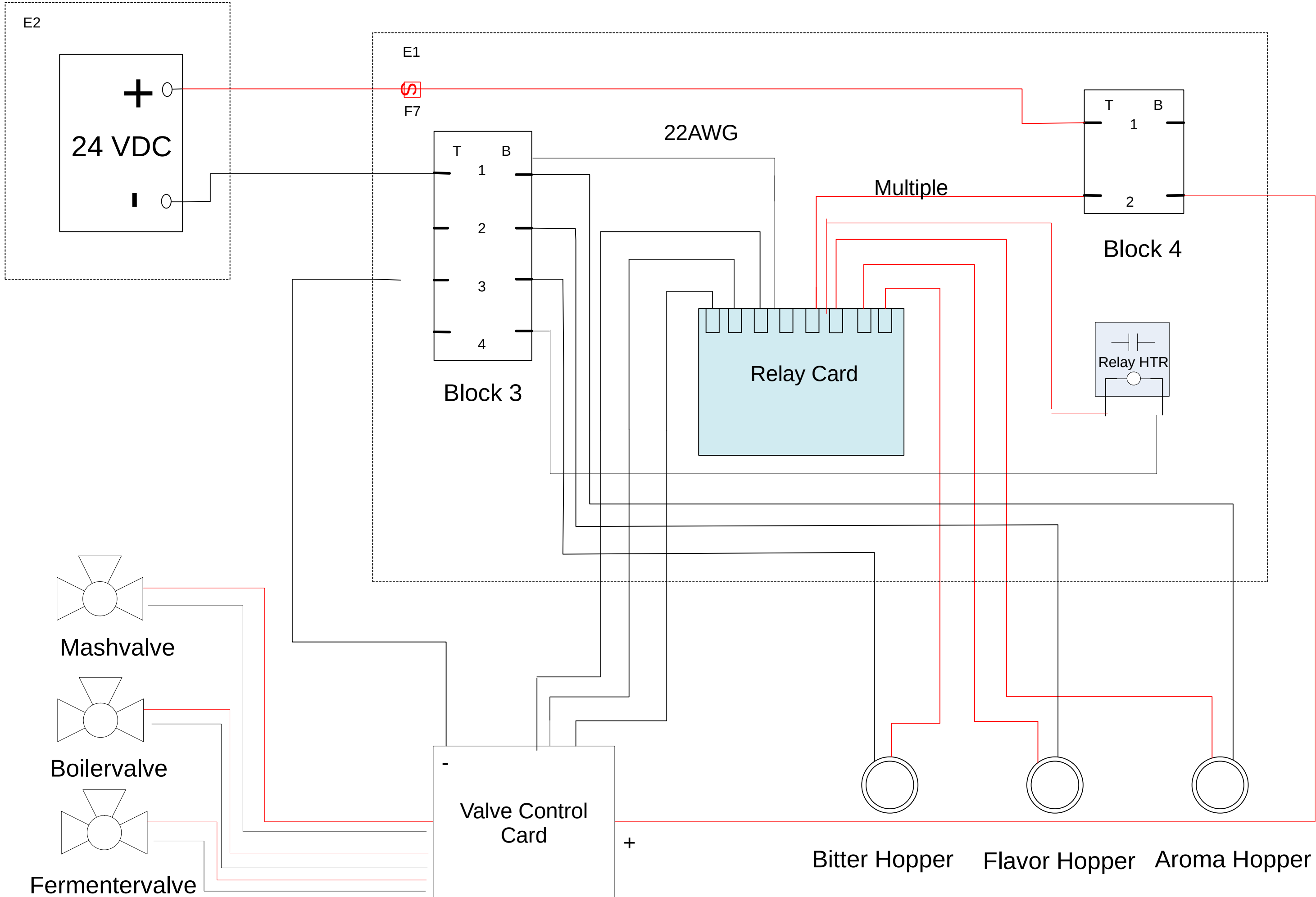


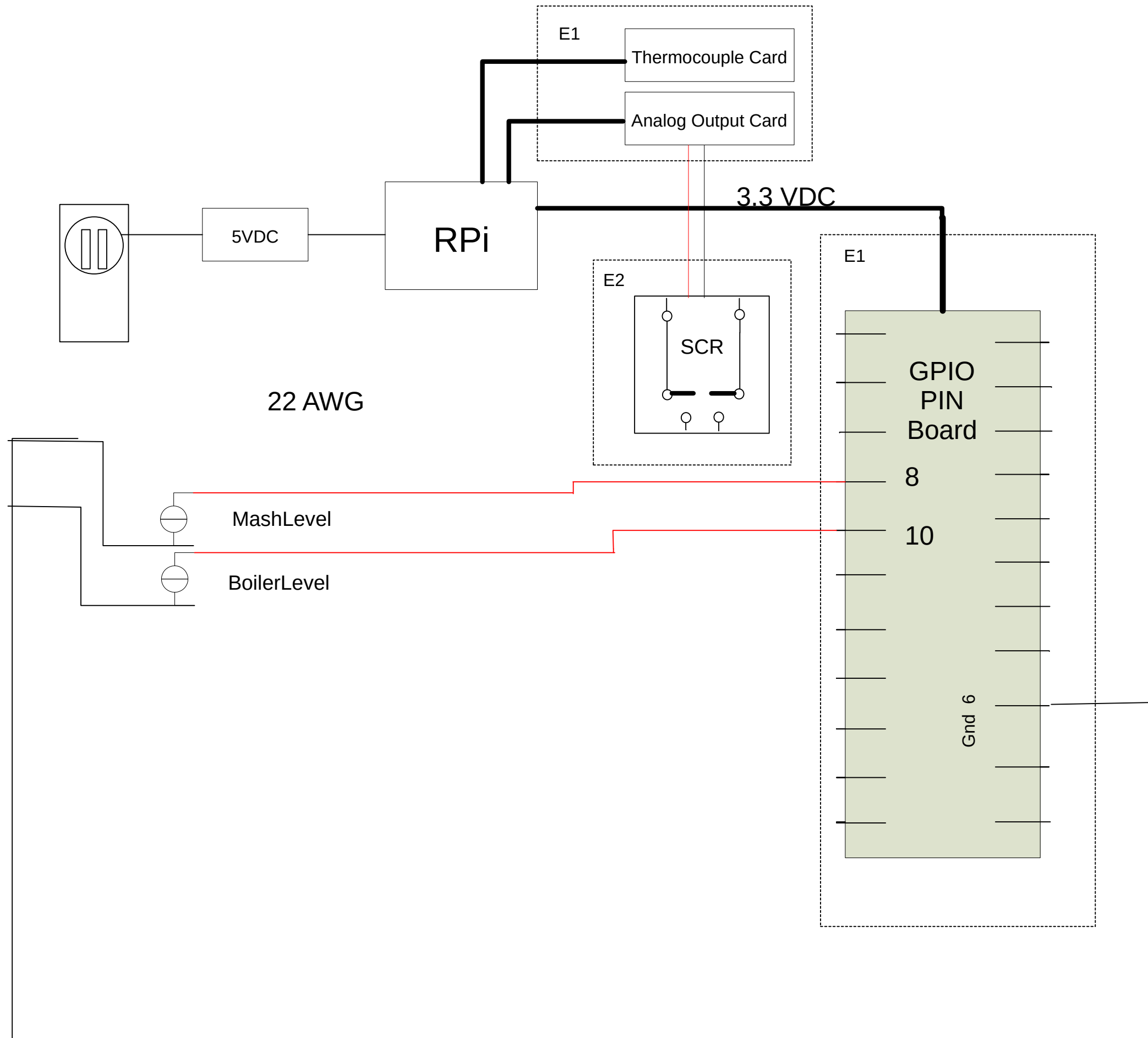


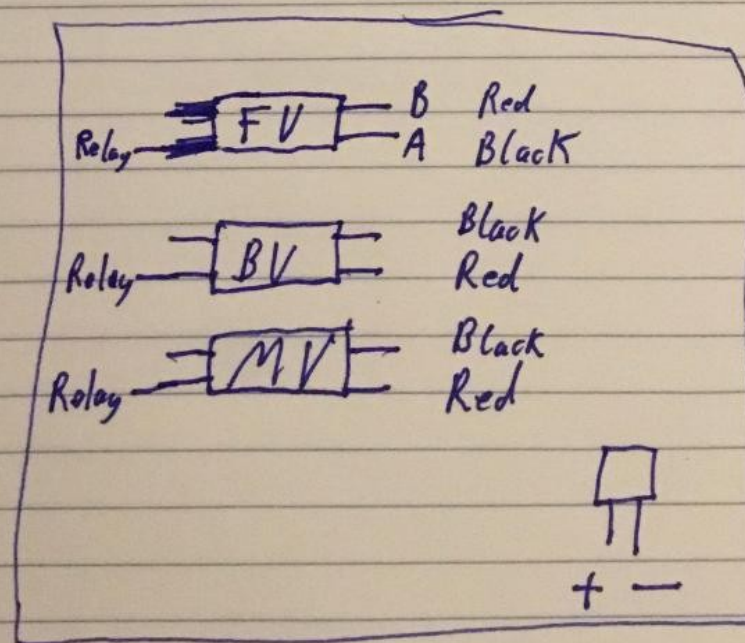
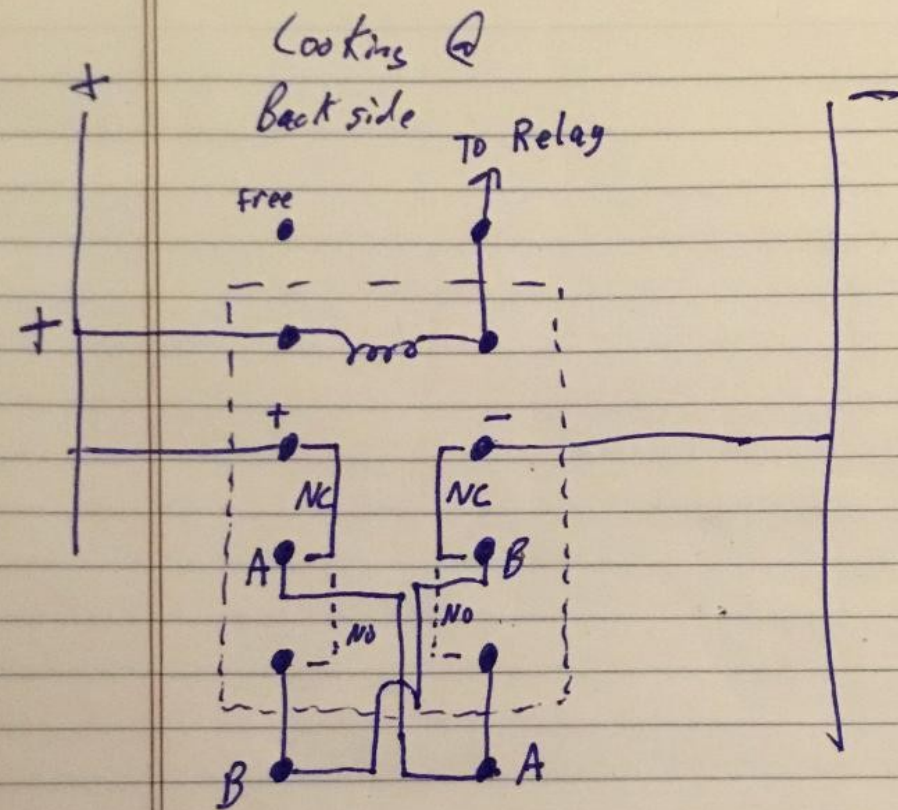








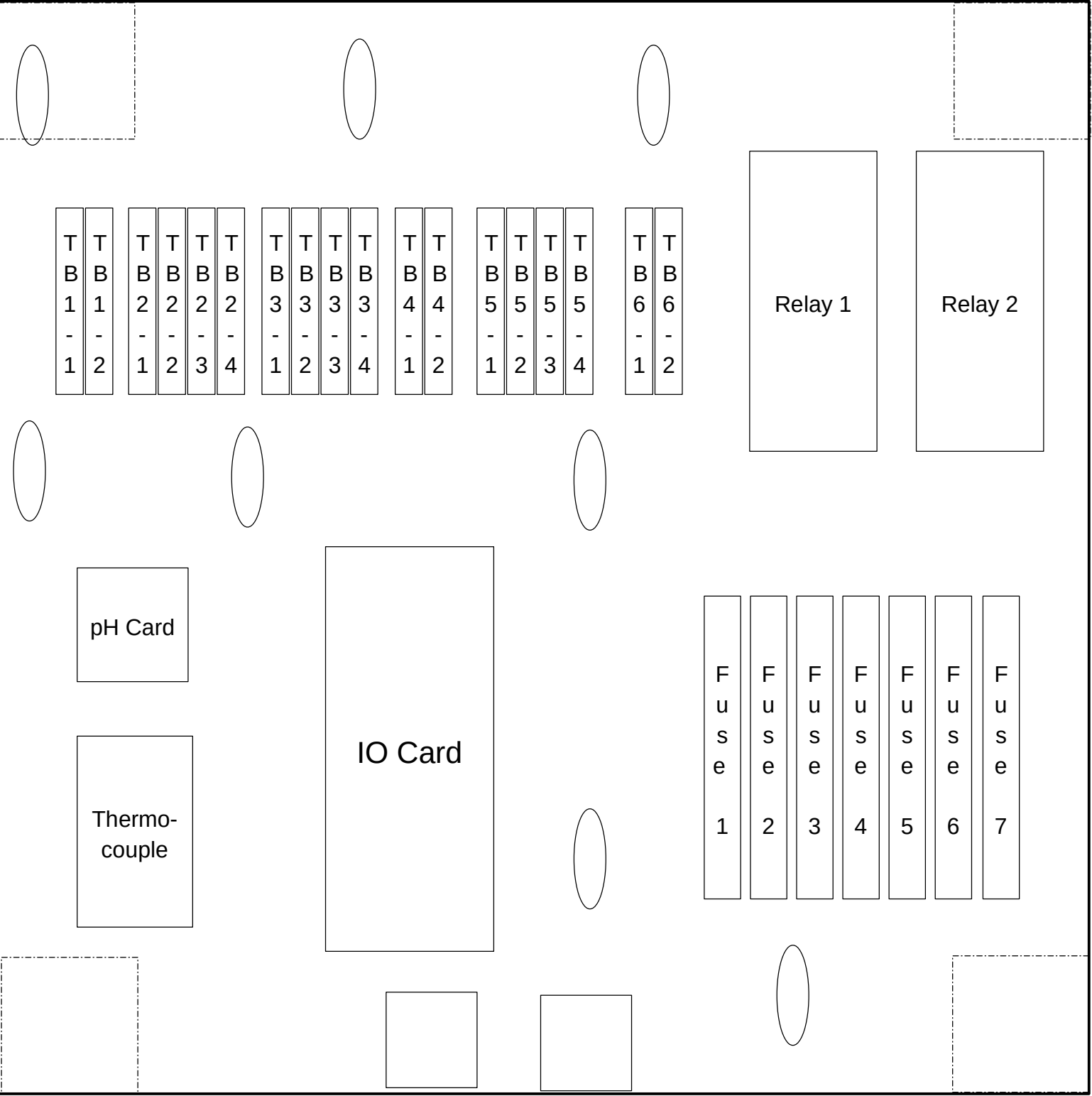




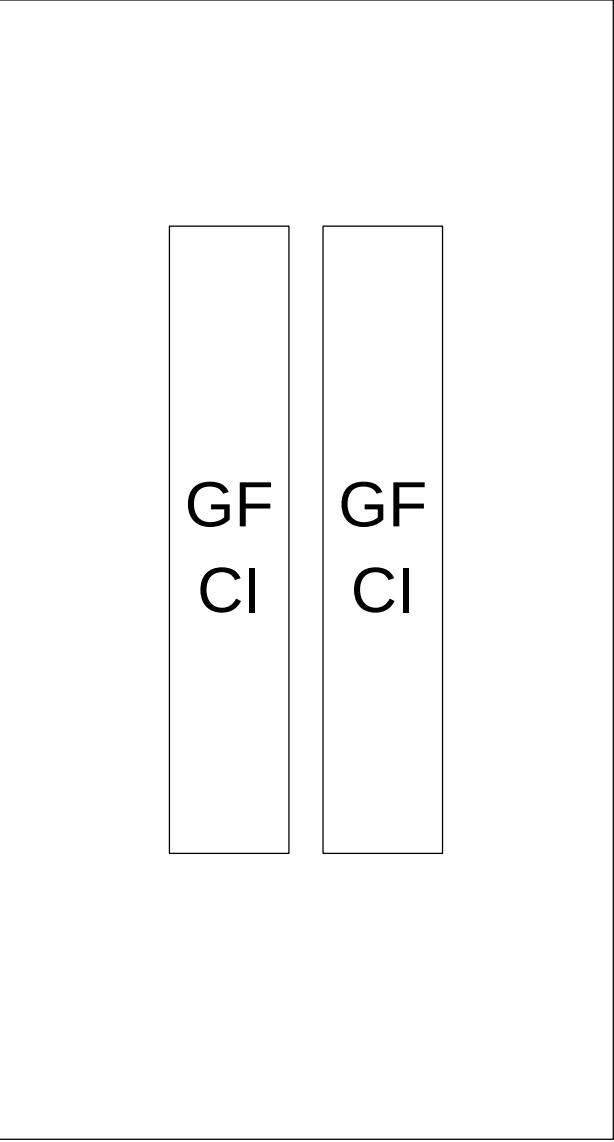
	Voltage	Compone nt	GPIO	RPI Pin	New Relay	Fuse	Fuse Size	Type
Mash Pump	120	0	1	28	1	F4	2	TD
Mash Valve	24	1	5	29	5	F7	2	Bus Fuse
Boiler Pump	120	2	26	37	2	F3	2	TD
Boiler Valve	24	3	20	38	6	F7	2	Bus Fuse
Ferm Valve	24	4	8	24	7	F7	2	Bus Fuse
Cooler Valve	24/120	5	7	26	4	F8		
Heater	120	6	22	15	3	CB	25	CB
Bitter Hopper	24	7	16	36	8	F7	2	Bus Fuse
Flavor Hopper	24	8	2	3	9	F7	2	Bus Fuse
Aroma Hopper	24	9	25	22	10	F7	2	Bus Fuse

A1	Black	Lower Enclosure	Upper Enclosure
A2	Black	Lower Enclosure	Upper Enclosure
A3	Red	Lower Enclosure	Top Panel
A4	Black	Upper Enclosure	Top Panel
A5	Green	Upper Enclosure	Top Panel
A6	Green	Upper Enclosure	Cooler Valve Area
A7	Red	Upper Enclosure	Top Panel
A8	Red	Fuse 1 Output	Cooler Valve Area
	Green	Mystery wire in Top Panel	
	Black	Mystery wire in Upper Enclosure	

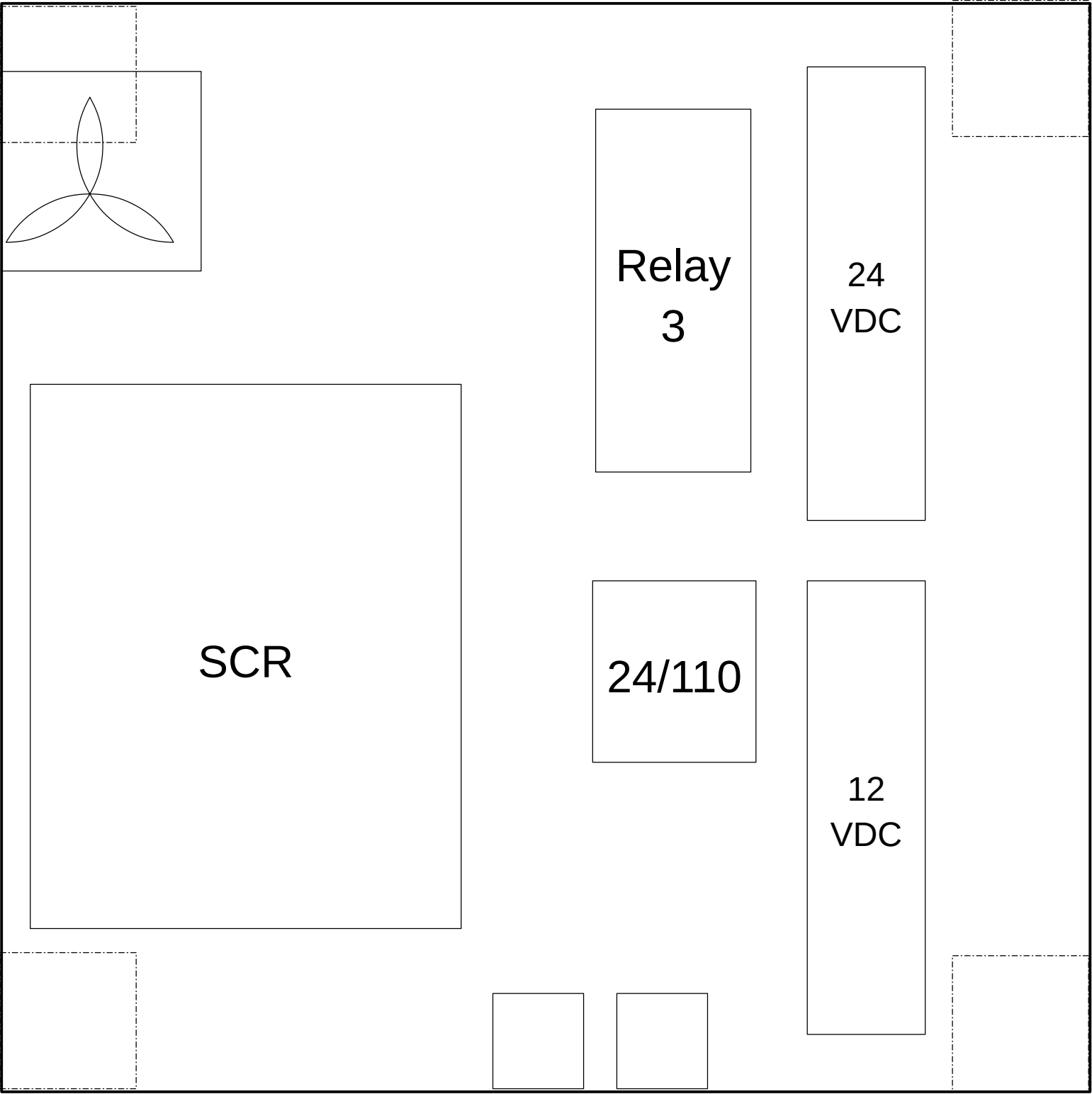
Mash Pump	15A GFCI	TB2	F4	MP	Relay 1 – NC	Relay 1 – Com	TB1	15A GFCI-N			
Mash Valve	24VDC+	F7	TB4	VCC	MVRelay	MV	MVRelay	Relay 5 - NC	Relay 5 – Com	TB3	24VDC-
Boiler Pump	15A GFCI	TB2	F3	BP	Relay 2 – NC	Relay 2 – Com	TB1	15A GFCI-N			
Boiler Valve	24VDC+	F7	TB4	VCC	BVRelay	MV	MVRelay	Relay 6 - NC	Relay 6 – Com	TB3	24VDC-
Ferm Valve	24VDC+	F7	TB4	VCC	FVRelay	MV	MVRelay	Relay 7 - NC	Relay 7 – Com	TB3	24VDC-
Cooler Valve	15A GFCI	TB2	F8	CV	Relay 4 – NC	Relay 4 – Com	TB1	15A GFCI-N			
Heater	24VDC+	F7	TB4	Relay 3 – Com	Relay 3 – NC	Relay HTR	TB3	24VDC-			
	25A GFCI	HTR	SC R	Relay HTR	25A GFCI-N						
Bitter Hopper	24VDC+	F7	TB4	Relay 8 – Com	Relay 8 – NC	BH	TB3	24VDC-			
Flavor Hopper	24VDC+	F7	TB4	Relay 9 – Com	Relay 9 – NC	FH	TB3	24VDC-			
Aroma Hopper	24VDC+	F7	TB4	Relay 10 – Com	Relay 10 – NC	AH	TB3	24VDC-			



Enclosure 1



Enclosure 3



Enclosure 2

Barley Works

